

Lectotypes and Original Material for Blume's Species and Varieties of *Fagaceae* from Japan

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In 1851, Carl Lodewijk von Blume, who studied extensively the specimens collected in Japan by Siebold, Bürger, their successors, and their Japanese correspondents, described a great number of new species and varieties of *Quercus* and other genera of *Fagaceae*. His treatment, especially of *Quercus*, influenced later workers on the family, and also studies of the flora and vegetation of Japan. To stabilize the taxonomy of the family, lectotypes for taxa described by Blume are herein designated for *Quercus* (13 species and 13 varieties), *Lithocarpus* (1 and 2), *Castanea* (1 and 10), and *Fagus* (1 and 2).

Key words: *Fagaceae*, Japanese flora, lectotypification, Siebold collections.

Carl Lodewijk von Blume (Karl Ludwig von Blume) studied extensively the specimens collected in Japan by Siebold, Bürger, their successors, and their Japanese correspondents. Blume (1851) described a great number of new species and varieties of *Quercus* and other genera of *Fagaceae*, and his treatment, especially of *Quercus*, influenced later workers on the family and also studies of the flora and vegetations of Japan.

Although several Japanese botanists studied the specimens used by Blume, they did not designate any lectotypes. Gen-ichi Koidzumi in 1925 and Takenoshin Nakai in 1926 visited Leiden, but did not designate lectotypes for any of Blume's taxa. In 1958 Hiroshi Hara studied several specimens of *Quercus* described by Blume, but he also did

not designate lectotypes. The type concept was not as well developed at those times as it is now.

Siebold, Bürger, their successors, and their Japanese correspondents gathered the specimens from various sources. The majority of the specimens appear to be from trees in spontaneous situations, but some were collected from cultivated trees in various gardens and nurseries.

During preparation of manuscripts on *Fagaceae* for recent publications on the Japanese flora (Ohba 1989, 2006), one of us (Ohba) awakened to the need to lectotypify the names of all specific and infraspecific taxa described by Blume from Japan. Such an undertaking is necessary for the sake of stability in the application of scientific names

to Japanese oaks and their allies. Since 2005, Akiyama and Thijssse have collaborated in the typification of taxa described by Siebold and Zuccarini, and Miquel based on Siebold's collections. We have also extended our interests to Blume's taxa, of which the type materials are also kept in the 'Herbarium Japonicarum Generale' in Leiden (L), and with corresponding specimens in München (M). All the specimens in L and M collected by Siebold, Bürger, their successors, and their Japanese correspondents listed in Yamaguchi et al. (2003).

This paper aims to provide data related to the types and original materials of all specific and infraspecific taxa described from Japan by Blume in 1851. Blume (1851) did not designate types nor cite the specimens he examined. Except in a few cases, no lectotypifications of Blume's taxa of *Fagaceae* have been made. We designate here lectotypes for all taxa described by Blume from Japan according to guidelines in the Vienna Code of the International Code of Botanical Nomenclature (McNeill et al. 2006). The designations are listed in alphabetical order, *Castanea* (1), *Fagus* (2), and *Quercus* (3–24).

The present taxonomic status of all taxa are given in Ohba (2006). The specimens, recorded on the CD-ROM database titled "*Von Siebold's Botanical Treasures in Leiden*" (de Kort et al. 2000), are indicated with an asterisk after the register number of the Nationaal Herbarium Nederland, Leiden University Branch (L) in parentheses after the collector's number of each specimen.

Castanea

1) ***Castanea japonica*** Blume, Mus. Bot. 1: 284 (1851).

Type: Japonia. Siebold s.n., as *Castanea vesca* Gaert. (L 0103250, 0103251 [two register numbers for one specimen] –lectotype, designated here). [Fig. 1]

Additional original material: Japonia. Bürger s.n. (L 0103235).

Current name: *Castanea crenata* Siebold & Zucc.

1a) [β] var. **quercina** Blume, Mus. Bot. 1: 285 (1851).

Type: Japonia. Siebold s.n. (L 0103229 –lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0103236).

This specimen represents wild individuals with small leaves.

Current name: *Castanea crenata* Siebold & Zucc.

1b) [γ] var. **longispina** Blume, Mus. Bot. 1: 285 (1851).

Type: Japonia. Siebold s.n. (L 0103254 –lectotype, designated here).

Current name: *Castanea crenata* Siebold & Zucc.

1c) [δ] var. **kusakuri** Blume, Mus. Bot. 1: 285 (1851).

Type: Japonia. Bürger s.n. (L 0103252 –lectotype, designated here).

Additional original material: Japonia. Bürger s.n. (L 0103253), with Koidzumi's identification slip.

Current name: *Castanea crenata* Siebold & Zucc.

This specimen, consisting of a small branch with many small leaves, appears to have been collected from an unusual or juvenile plant.

1d) [ζ] var. **ookasi** Blume, Mus. Bot. 1: 285 (1851).

Type: Japonia. Bürger s.n. (L 0103234 –lectotype, designated here).

Additional original material: Bürger s.n. (L 0103233).

Current name: *Castanea crenata* Siebold & Zucc.

This is an unusual form with relatively small, narrowly oblong leaves with 14 to 16 pairs of lateral veins, truncately or rounded cuneate equal base and acuminate apex. The

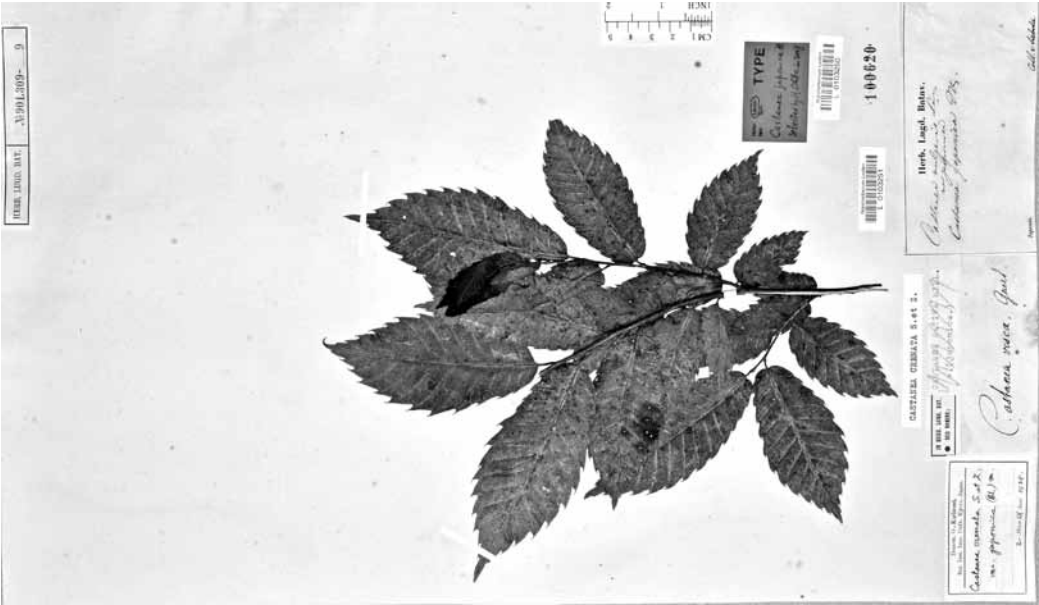


Fig. 1. Lectotype of *Castanea japonica* Blume. Siebold s.n. (L 0103250, 0103251 [two register numbers for one specimen]).

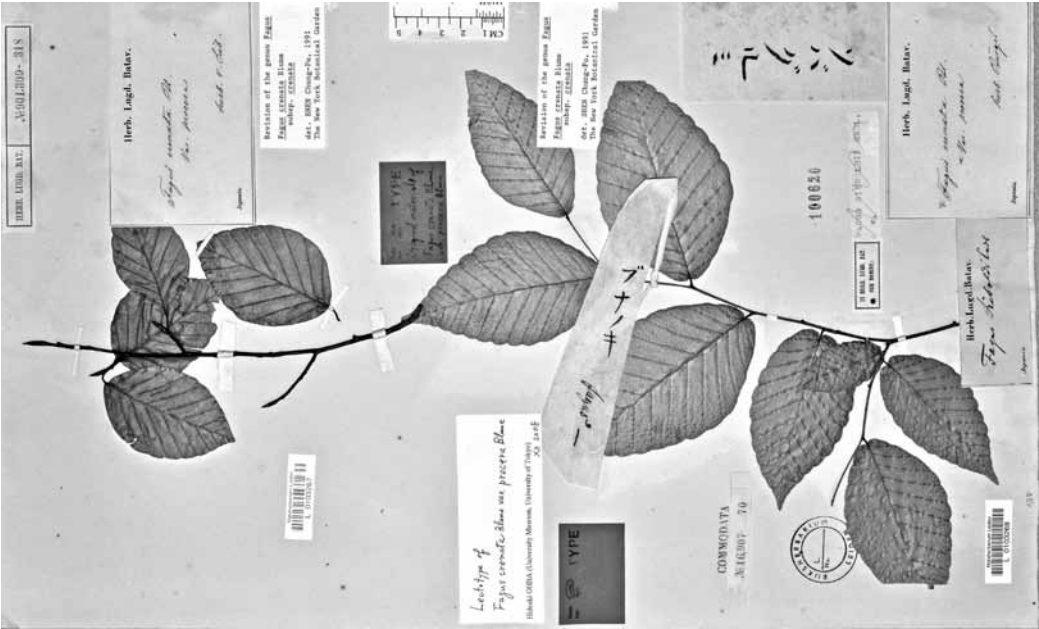


Fig. 2. Lectotype of *Fagus crenata* Blume [β] var. *procera* Blume. Bûrger s.n. (L 0103268).

spines on the margins are not extruding, and most of them are short and inconspicuous, and some of them are ascending.

1e) [η] var. **spontanea** Blume, Mus. Bot. **1**: 285 (1851).

Type: Siebold s.n., with name “Chiuguri” (in Japanese) (L 0103264—lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0103263).

Current name: *Castanea crenata* Siebold & Zucc.

1f) [θ] var. **vulgaris** Blume, Mus. Bot. **1**: 285 (1851).

Type: Japonia. Siebold s.n., as *Castanea vesca* α.*vulgaris* (L 0103265—lectotype, designated here).

Current name: *Castanea crenata* Siebold & Zucc.

1g) [ι] var. **siba-kuri** Blume, Mus. Bot. **1**: 286 (1851).

Type: Japonia. Pierot s.n. (L 0103228—lectotype, designated here).

Additional original material: Japonia. In collibus sylvis juxta pagum Kawasaki ins. Nippon. Pierot 420 (L 0103237); Bürger s.n. (L 0103231).

Current name: *Castanea crenata* Siebold & Zucc.

Pierot s.n. (L 0103228) has rather narrow leaves with unequal rounded base, long acuminate apex, serrulate-cuspidate margins, and sparse glandular hairs when young, and agrees with the original description. Pierot 420 (L 0103237) consists only of a branch with many leaves. Some leaves of the basal part are widely lanceolate, 21 x 6.7 cm, others in the apical part are narrowly oblong. This also agrees with the original description.

1h) [κ] var. **oblexta** Blume, Mus. Bot. **1**: 286 (1851).

Type: Japonia. Bürger s.n. (L 0103232—lectotype, designated here).

Additional original material: Japonia.

Bürger s.n. (L 0103255); Bürger s.n. (L 0103256).

Current name: *Castanea crenata* Siebold & Zucc.

This specimen represents the rather common wild individuals with narrowly oblong leaves and small cupules. Pierot 647, collected “in sylvis prope urbem Yedo ins. Nippon,” appears to be a duplicate of Bürger s.n. (L 0103256).

1i) [λ] var. **elongata** Blume, Mus. Bot. **1**: 286 (1851).

Type: Japonia. Bürger s.n. (L 0103247—lectotype, designated here).

Additional original material: Bürger s.n. (L 0103248).

Current name: *Castanea crenata* Siebold & Zucc.

1j) [μ] var. **canescens** Blume, Mus. Bot. **1**: 286 (1851).

Type: Japonia. Siebold s.n. (L 0420819—lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0420820).

Current name: *Castanea crenata* Siebold & Zucc.

The leaves are conspicuously pale whitish with dense soft hairs on the lower surface and has 16 to 18 conspicuous lateral veins on each side.

Fagus

2) **Fagus crenata** Blume, Mus. Bot. **1**: 307 (1851).

Type: Japonia. Keiske Ito (in Herb. Siebold) 14, with names “Sobagurumi” and “Kurobuna” (in Japanese) and “*Fagus Kurobuna*” (L 0040617*—lectotype, designated here).

Additional original material: Japonia. Siebold s.n., with names “Bunanoki” (in Japanese) and “*Fagus ferruginea*” (L 0175953).

Current name: *Fagus crenata* Blume.

2a) [β] var. **procera** Blume, Mus. Bot.

1: 307 (1851).

Type: Japonia. Bürger s.n. (L 0103268 –lectotype, designated here). [Fig. 2]

Additional original material: Japonia. Siebold s.n. (L 0103267).

Current name: *Fagus crenata* Blume.

2b) [γ] var. **undulata** Blume, Mus. Bot. 1: 307 (1851).

Fagus sieboldii Endl. var. *undulata* Blume ex Miq., Ann. Mus. Lugduno-Batavi 3: 194 (1867); H. Ohba & al. in Bull. Univ. Mus. Univ. Tokyo (41): 38 (2005).

Type: Bürger s.n. (L 0040618*–lectotype, designated here).

Additional original material: Japonia. Bürger s.n. (L 0040619).

Current name: *Fagus crenata* Blume.

Bürger s.n. (L 0040618) was also designated as the lectotype of *Fagus sieboldii* var. *undulata* Blume ex Miq. by Ohba et al. (2005).

Quercus

3) **Quercus aliena** Blume, Mus. Bot. 1: 298 (1851).

Type: Japonia. Siebold s.n. (L 0040832* –lectotype, designated here).

Additional original material: Japonia. Bürger s.n. (L 0103196).

Current name: *Quercus aliena* Blume.

3a) [β] var. **pellucida** Blume, Mus. Bot. 1: 298 (1851).

Type: Japonia. Siebold s.n. (L 0040831 –lectotype, designated here). [Fig. 3]

Additional original material: Japonia. Siebold s.n. (L 0103195); Bürger s.n. (L 0103197).

Current name: *Quercus aliena* Blume var. *pellucida* Blume.

The glabrous or sparsely stellate-hairy lower surface of the leaves of var. *pellucida* distinguish it from var. *aliena*, which has dense stellate hairs.

4) **Quercus buergeri** Blume, Mus. Bot. 1:

299 (1851), ut *bürgeri*.

Type: not yet found in L and M.

5) **Quercus canescens** Blume, Mus. Bot. 1: 296 (1851).

Type: Japonia. Bürger s.n. (L 10040861* –lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0040862).

Current name: *Quercus serrata* Murray.

6) **Quercus crispula** Blume, Mus. Bot. 1: 298 (1851); H. Ohba in K. Iwats. & al., Fl. Jap. 2a: 47 (2006).

Type: Japonia. [In saltibus montis Hakone insulae Nippon]. Bürger s.n. (L 0040838–lectotype, designated here).

[Fig. 4]

Current name: *Quercus crispula* Blume.

Pierot 642 (L 0040837*), with a note on the habitat, “In saltibus montis Hakone ins. Nippon,” was also collected in Hakone, and is regarded as a duplicate of the lectotype, because the Pierot collection from Japan was actually collected by Bürger. The lectotype, which lacks detailed collection information, was probably collected in Hakone (central Honshu) as mentioned by Pierot.

The treatment of *Quercus crispula* is still controversial, with two schools of thought: one is that it is a distinct species endemic to Japan (with some extension to the adjacent regions), and two, that it is conspecific with *Q. mongolica* Fisch. Ohba (1989, 2006) treats it as a distinct species.

7) **Quercus gilva** Blume, Mus. Bot. 1: 306 (1851).

Type: Japonia. Bürger s.n. (L 0103348 –lectotype, designated here). [Fig. 5]

Additional original material: Japonia. Bürger s.n. (L, L 0103347); Bürger s.n., with name “*Quercus Konara*” (L 0103346); Siebold s.n. with names “*Ichikasi*” (in Japanese), “*Quercus itsikas*” (L 0103345).

Current name: *Quercus gilva* Blume.

7a) [β] var. **procera** Blume, Mus. Bot.



Fig. 3. Lectotype of *Quercus aliena* Blume [β] var. *pellucida* Blume. Siebold s.n. (L 0040831).

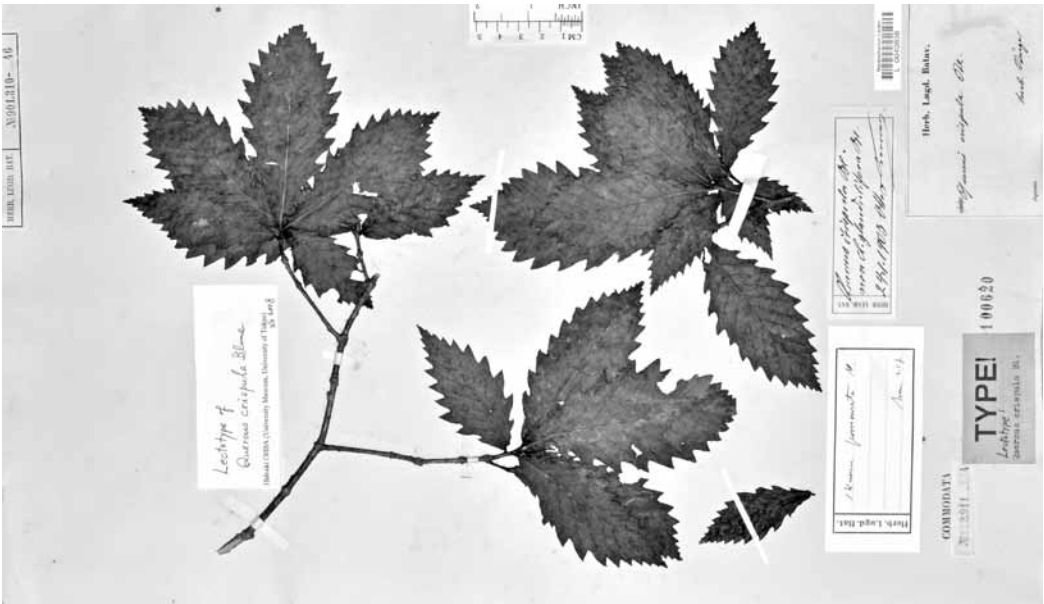


Fig. 4. Lectotype of *Quercus crispula* Blume. Bürger s.n. (L 0040838).

1: 306 (1851).

Type: Japonia. Bürger s.n. (L 0103350 –lectotype, designated here). [Fig. 6]

Additional original material: Japonia. Bürger s.n. (L 0103351); Siebold s.n. with names “Yamabiwa” (in Japanese) and “*Quercus Yamabiwa*” (L 0103349).

Current name: *Quercus gilva* Blume.

The leaves of the lectotype and original material of *Quercus gilva* (var. *gilva*) are mostly 5–7 cm long and 1.7–2 cm wide; those of var. *procera* are 7–17 cm long and 3–4 cm wide. In *Quercus gilva* the leaves vary continuously from 6–14 cm long and 2–4 cm wide (Ohba 2006). No other differences can be found between these two varieties.

8) ***Quercus glabra*** Thunb.

8a) [β] var. **sublepidota** Blume, Mus. Bot. 1: 289 (1851).

Type: Japonia. Bürger s.n. (L 0103281 –lectotype, designated here). [Fig. 7]

Current name: *Lithocarpus edulis* (Makino) Nakai.

The Bürger specimen (L 0103281) includes two branches, probably collected in early summer with staminate inflorescence and nuts of the second year. The petiolate leaves are 7–9 cm long and 2.8–3.3 cm wide with cuspidate apex, long cuneate base and entire margins. These leaves, without doubt, fall within the range of variation seen in leaves of *Lithocarpus edulis*. Pierot 203 (L 0103282, 0103272), collected “in sylvis montis Kuni Mi Yama ins. Kiu Siu,” is regarded as a duplicate of the lectotype. Pierot retained the Japanese name “Satuma Si” on the label.

8b) [γ] var. **micrococca** Blume, Mus. Bot. 1: 290 (1851).

Type: Japonia. Bürger s.n. (L 0103279 –lectotype, designated here). [Fig. 8]

Additional original material: Japonia. Bürger s.n. (L 0103280); Bürger s.n. (L 0103278).

Current name: *Lithocarpus edulis* (Makino)

Nakai.

Two specimens collected by Bürger s.n. (L 0103280, 0103278) have the handwritten “*Quercus glabra* Thunb. var. *micrococca*,” probably by the same person on the lectotype. Blume characterized this variety by the larger leaves (2.5–6.5 poll., 3/4–2.5 poll. wide; petioles 6–10 lin.), and the minor cupules, which have the nuts usually concave apically. These two specimens lack cupules, and the leaves are no larger than those of Bürger s.n. (L 0103279).

The characters used by Blume for this variety are considered to be taken only from Bürger L 0103279.

9) ***Quercus glandulifera*** Blume, Mus. Bot. 1: 295 (1851).

[var. *glandulifera*].

Type: Japonia. Siebold ex an unknown Japanese collector [? Keiske 14] s.n. (L 0040833* –lectotype, designated here).

Current name: *Quercus serrata* Murray.

9a) [β] var. **subattenuata** Blume, Mus. Bot. 1: 295 (1851).

Type: Japonia. Bürger s.n. (L 0040863* –lectotype, designated here).

Additional original material: Japonia. Bürger s.n. (L 0325670, 0103292, 0103293); Keiske 330, with names “Sodara”, “Konara”, “Ho” (L 0175762); ?Siebold s.n. (L 0103294).

Current name: *Quercus serrata* Murray.

9b) [γ] var. **inaequaliserrata** Blume, Mus. Bot. 1: 295 (1851).

Type: Japonia. Siebold s.n. (L 0040836* –lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0103289).

Current name: *Quercus serrata* Murray.

9c) [δ] var. **subcrenata** Blume, Mus. Bot. 1: 295 (1851).

Type: Japonia. Siebold s.n. (L 0103290 –lectotype, designated here). [Fig. 9]

Current name: *Quercus serrata* Murray.



Fig. 6. Lectotype of *Quercus gilva* Blume [β] var. *procera* Blume. Bürger s.n. (L 0103350).



Fig. 5. Lectotype of *Quercus gilva* Blume. Bürger s.n. (L 0103348).



Fig. 8. Lectotype of *Quercus glabra* Thunb. [γ] var. *micrococca* Blume, Bürger s.n. (L 0103279).



Fig. 7. *Quercus glabra* Thunb. [β] var. *sublepidota* Blume, Bürger s.n. (L 0103281).

Mohnike s.n. (L 0040834) and Pierot 185, collected in “saltibus montis Hakone ins. Nippon” (L 0103291) are also representative.

9d) [ε] var. **polymorpha** Blume, Mus. Bot. 1: 295 (1851).

Type: Japonia. Bürger s.n. (L 0103286* –lectotype, designated here).

Additional original material: Japonia. Buerger s.n. (L 0103287); Siebold s.n., with name “itsikas” (L 0040835).

Current name: *Quercus serrata* Murray.

Blume described *Quercus glandulifera* including four varieties, *Q. canescens* and *Quercus urticifolia* as species different from *Quercus serrata* Murray, and considered to be *Quercus serrata* the present *Quercus acutissima* Carruth. The three species and four varieties described by Blume are conspecific with *Quercus serrata*.

10) **Quercus glauca** Thunb.

10a) [β] var. **nudata** Blume, Mus. Bot. 1: 303 (1851).

Type: Japonia. Bürger s.n. (L 0103310 –lectotype, designated here). [Fig. 10]

Additional original material: Japonia. Bürger s.n. (L, L0103311); Siebold s.n. (L 0103312).

Current name: *Quercus glauca* Thunb.

Pierot 652, collected “in sylva prope pagum Umesima ins. Nippon” (L 0103313), appears to be a duplicate of Siebold s.n. (L 0103312).

10b) [γ] var. **fasciata** Blume, Mus. Bot. 1: 303 (1851).

Type: Japonia. Siebold s.n. (L 0103307 –lectotype, designated here). [Fig. 11]

Current name: *Quercus glauca* Thunb.

10c) [δ] var. **stenophylla** Blume, Mus. Bot. 1: 303 (1851).

Type: Japonia. Siebold s.n., with name “*Quercus sirokasi*” (L 0103315 –lectotype, designated here). [Fig. 12]

Additional original material: Japonia. ?Sukeroku Mizutani (L 0103314); in monte

Ywaja circa altitudinem 800 ped [sic], cum vere cuspidata et KuroKaj. Siebold s.n., with name “*Quercus Sirokasi*” (L 0103316sic); Bürger s.n. (L 0103317).

Current name: *Quercus salicina* Blume.

All of these specimens represent *Quercus salicina* Blume with lanceolate leaves.

10d) [ε] var. **caesia** Blume, Mus. Bot. 1: 303 (1851).

Type: Not yet found in L and M.

11) **Quercus grosseserrata** Blume, Mus. Bot. 1: 306 (1851).

Quercus crispula Blume var. *grosseserrata* (Blume) Miq., Ann. Mus. Lugduno-Batavi 1: 104 (1893).

Type: Japonia. Bürger s.n. (L 0040839* –lectotype, designated here).

Current name: *Quercus crispula* Blume.

The lectotype specimen consists of a branch with five, almost sessile, widely oblanceolate leaves with fine rough serrations. It represents the typical form of tillers with leaves of *Quercus crispula*. De Kort et al. (2000) erroneously reported this specimen to be the type of *Quercus crispula* f. *grosseserrata* Blume.

12) **Quercus hirsutula** Blume, Mus. Bot. 1: 298, in nota sub *Q. aliena* Blume (1851).

Type: not found in L and M.

13) **Quercus holosericea** Blume, Mus. Bot. 1: 298, in nota sub *Q. aliena* Blume (1851).

Type: not found in L. and M.

14) **Quercus humosa** Blume, Mus. Bot. 1: 298 (1851), in nota sub *Q. aliena* Blume.

Type: Not found in L and M.

15) **Quercus lacera** Blume, Mus. Bot. 1: 306 (1851).

Type: Japonia. Siebold (ex Keisuke) s.n., with name “Hiryukasi” (L 0103319 –lectotype, designated here). [Fig. 13]

Current name: *Quercus glauca* Thunb.

This is *Quercus glauca* Thunb. with deeply lobulate leaves.

16) **Quercus laevigata** Blume, Mus. Bot.

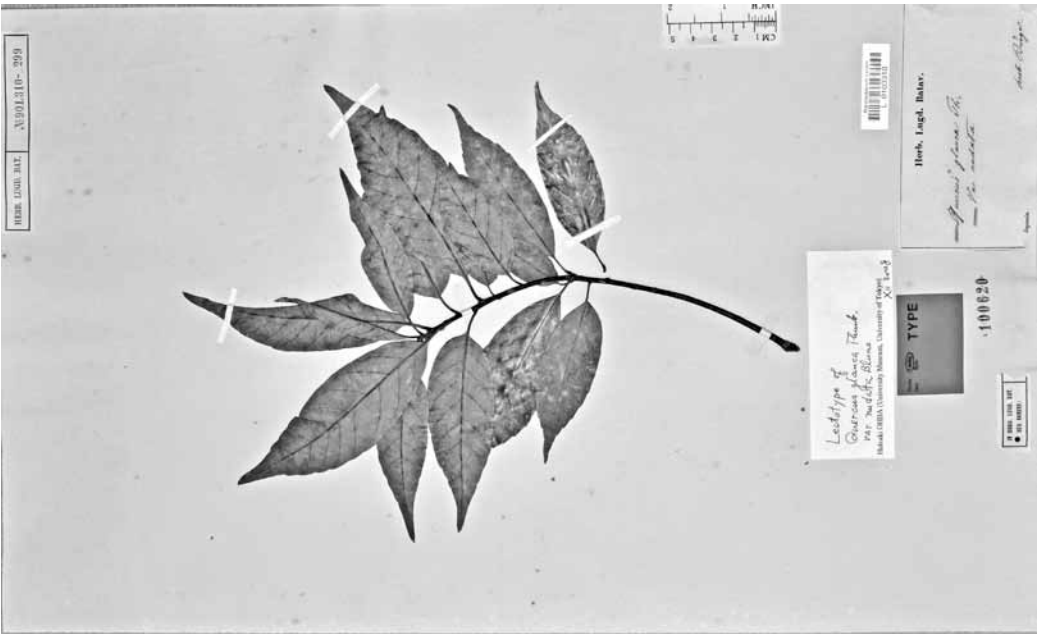


Fig. 10. *Quercus glauca* Thunb. [β] var. *nudata* Blume. Bürger s.n. (L 0103310).



Fig. 9. Lectotype of *Quercus glandulifera* Blume [δ] var. *subcrenata* Blume. Siebold s.n. (L 0103290).



Fig. 11. Lectotype of *Quercus glauca* Thunb. [γ] var. *fasciata* Blume. Siebold s.n. (L 0103307).



Fig. 12. Lectotype of *Quercus glauca* Thunb. [δ] var. *stenophylla* Blume. Siebold s.n. (L 0103315).

1: 304 (1851).

Type: not yet found in L and M.

17) *Quercus marginata* Blume, Mus. Bot.

1: 304 (1851).

Type: Japonia. Bürger s.n. (L 0040823*–lectotype, designated here).

Current name: *Quercus acuta* Thunb.

Quercus marginata falls within the synonymy of *Quercus acuta* Thunb. The margins of the leaves of *Quercus acuta* are usually entire, but rarely have small teeth apically or are shallowly undulate as in the lectotype of *Quercus marginata*.

18) *Quercus myrsinifolia* Blume, Mus. Bot. 1: 305 (1851).

Type: Siebold (ex Keisuke 321), with name “Hosobagasi” and “tyo” (in Chinese letter) s.n. (L 0175956*–lectotype, designated here).

Current name: *Quercus myrsinifolia* Blume.

19) *Quercus salicina* Blume, Mus. Bot. 1: 305 (1851).

Type: Japonia. Bürger (? ex Keisuke) s.n. (L 0040842–lectotype, designated here).

[Fig. 14]

Additional original material: Japonia. Siebold (actually Bürger) s.n. (L 0040840*); ?Bürger s.n. (L 0040843); ?Bürger (L 0040841).

Current name: *Quercus salicina* Blume.

20) *Quercus serrata* Thunb.

Blume considered Thunberg’s *Quercus serrata* to be *Quercus acutissima* Carruth. All varieties described under *Quercus serrata* are synonyms of *Quercus acutissima*.

20a) [β] var. **tanbakuri** Blume, Mus. Bot. 1: 297 (1851).

Type: Japonia. Bürger s.n. (L 0040826*–lectotype, designated here).

Current name: *Quercus acutissima* Carruth.

Blume cited a Japanese name “Tanbakuri” as “fide Herb. Bürger,” but this specimen lacks indication of the Japanese name. Additional specimens might still be found. The shape of the leaves is similar to those of *Castanea*

crenata Siebold & Zucc., but the veinlets always end at the apex of marginal teeth.

20b) [γ] var. **attenuata** Blume, Mus. Bot. 1: 297 (1851).

Type: Japonia. Bürger s.n. (L 0040824*–lectotype, designated here).

Additional original material: Japonia. Bürger s.n. (L 0040825).

Current name: *Quercus acutissima* Carruth.

Blume separated var. *attenuata* from *Quercus acutissima* var. *acutissima* by the narrow leaves and often attenuate leaf base. This is only an extreme example of the variation in the leaves of *Quercus acutissima*.

20c) [δ] var. **nana** Blume, Mus. Bot. 1: 297 (1851).

Type: Japonia. Bürger s.n. (L 0040827*–lectotype, designated here).

Additional original material: Japonia. Siebold s.n. (L 0040828).

Current name: *Quercus acutissima* Carruth.

20d) [ε] var. **obtusata** Blume, Mus. Bot. 1: 297 ([1850], actually 1851).

Type: Japonia. Bürger s.n. (L 0040830–lectotype, designated here). [Fig. 15]

Additional original material: Japonia. Siebold s.n. (L 0040829*).

Current name: *Quercus acutissima* Carruth.

Siebold s.n. (L 0040829) is more similar to var. *nana* than var. *obtusata*, and probably Blume mistakenly wrote that name.

21) *Quercus sessilifolia* Blume, Mus. Bot. 1: 305 (1851). H. Hara in J. Jap. Bot. 33: 146 (1958).

Quercus paucidentata Franch. ex Nakai in Bot. Mag. (Tokyo) 40: 583 (1926).

Cyclobalanopsis sessilifolia (Blume) Schottky in Bot. Jahrb. Syst. 47: 652 (1912). Nakai in J. Jap. Bot. 15: 202 (1939), as *C. sessilifolia* (Blume) Nakai.

Type: Japonia. Siebold (ex Keiske 84 (deleted)) s.n. (L 0040844*–lectotype, designated here).

Current name: *Quercus sessiliflora* Blume.



Fig. 13. *Quercus lacera* Blume, Siebold (ex Keisuke) s.n. (L 0103319).



Fig. 14. *Quercus salicina* Blume, Bürger (? ex Keisuke) s.n. (L 0040842).



Fig. 16. *Quercus sieboldiana* Blume, Siebold s.n. (L 0103327).



Fig. 15. *Quercus serrata* Thunb. [ε] var. *obtusata* Blume, Bürger s.n. (L 0040830).

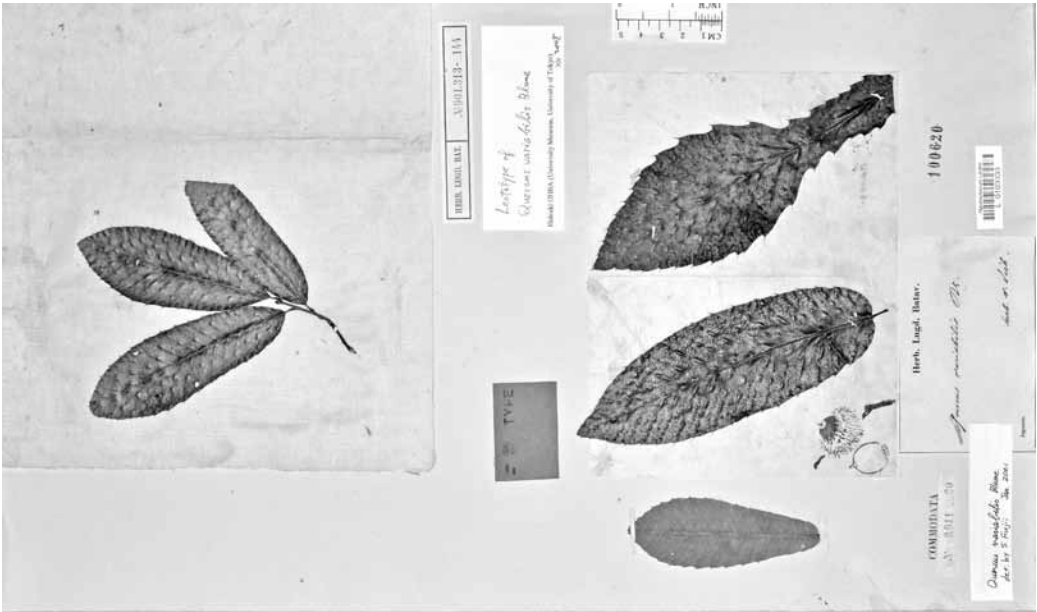


Fig. 18. *Quercus variabilis* Blume, Siebold (ex Sukeroku Mizutani) s.n. (L 0103333, lower).

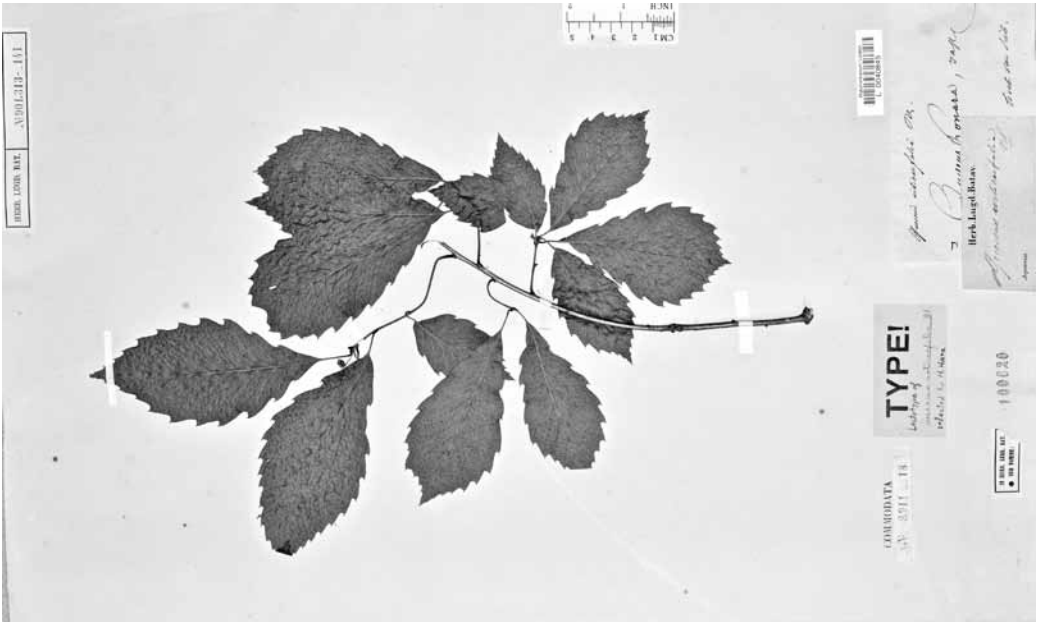


Fig. 17. *Quercus urticifolia* Blume, Siebold s.n. (L 0040845).

Nakai (1926, 1939) wrote that the type specimen of *Quercus sessilifolia* is in the Rijksherbarium at Leiden, but did not designate a lectotype. Hara (1958) later wrote that he examined the type at Leiden in 1954 and annotated the sheet indicating that it was the type of *Quercus sessilifolia*, but he also did not designate a lectotype.

22) ***Quercus sieboldiana*** Blume, Mus. Bot. 1: 290 (1851).

Type: Japonia. Siebold s.n., with name 'Kashi' (in Japanese) (L 0103327–lectotype, designated here). [Fig. 16]

Additional original material: Japonia. Siebold s.n. (L 0103326); Bürger s.n. (L 0103328); Bürger s.n. (L 0103325).

Current name: *Lithocarpus glabra* (Thunb.) Nakai.

23) ***Quercus urticifolia*** Blume, Mus. Bot. 1: 296 (1851), ut *urticaefolia*.

Type: Japonia. Siebold s.n. (L 0040845–lectotype, designated here). [Fig. 17]

Hara annotated this specimen as the lectotype, but did not publish his choice.

Additional original material: Siebold, with "No. 3, *Quercus konara* Variet. β," (L 0103331, 0103330 [duplicate of 0103331]); Siebold s.n. (L 0103329).

Current name: *Quercus serrata* Murray.

In Siebold No. 3 the scales of the cupule are narrowly subulate and similar to those of *Quercus dentata* and *Quercus acutissima*. Such cupules with narrowly subulate scales are rarely found in *Quercus serrata* or *Quercus crispula*, they are thought to be the result of teratological atavism.

23a) [β] var.: ***foliis brevius petiolatis basi acutis v. obtusis***.

This "variety" is based on Siebold s.n. with "Kumaside" and "*Quercus Konara*" (L 0103332).

Current name: *Quercus serrata* Murray.

24) ***Quercus variabilis*** Blume, Mus. Bot. 1: 297 (1851).

Type: Japonia. Siebold (ex Sukeroku Mizutani) s.n. (L 0103333 lower–lectotype, designated here). [Fig. 18]

Additional original material: Siebold (ex ?Keiske 271) (L 0103333, upper).

Current name: *Quercus variabilis* Blume.

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Bürger and von Siebold's collaborators, and now housed in the National Herbarium of the Netherlands and the Botanische Staatssammlung München. *Calanus Special No. V*, 191–576.

大場秀章^a, 秋山 忍^b, G. タイセ^c: **Blume** が **1851** 年に日本から記載したブナ科の種及び変種のレクトタイプと原資料

Blume は、日本からの Siebold, Bürger, Pierot, Textor, Mohnike, Keiske (伊藤圭介) らの採集品からなるシーボルト・コレクション中のブナ科を研究し、その結果を 1851 年に論文にまとめた。そのなかで多数の新種や新変種が発表されたが、記載ではまったくタイプの指定がなされなかった。学名の安定化などの目的で、ライデンならびにミュンヘンに収蔵される

シーボルト・コレクションから Blume が記載に用いた標本（原資料）を特定した。16 種 27 変種については、記載に最もよく合致する標本を選定し、レクトタイプに指定した。しかし、記載された分類群のうち、5 種 1 変種については該当する標本を見出すことができなかった。

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